

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A library of proteins comprising: a plurality of fibronectin-based scaffolds having a fibronectin type III domain (¹⁰Fn3) in which at least three solvent accessible loops are randomized, ~~derived from the tenth module of the human fibronectin type III domain (¹⁰Fn3) having at least three randomized loops~~, said ~~library comprising proteins~~ plurality of fibronectin-based scaffolds being characterized by their ability to bind to compounds that are not bound by ~~said~~ a human fibronectin type III domain and wherein said binding ability results from said randomization of at least three loops.
8. (Currently amended) The library of claim 1, wherein said ~~library comprises~~ plurality of fibronectin-based scaffolds ~~proteins in which~~ are characterized in that one of said randomized loops is extended in length relative to the corresponding loop of human ¹⁰Fn3.
9. (Currently amended) The library of claim 1, wherein said plurality of fibronectin-based scaffolds ~~proteins~~ lack an integrin-binding motif.
10. (Cancelled)
11. (Previously presented) The library of claim 9, wherein said integrin-binding motif is replaced by an amino acid sequence comprising serine-glycine-glutamate.
12. (Currently amended) The library of claim 1, wherein said plurality of fibronectin-based scaffolds ~~proteins~~ of said library lack disulfide bonds.
13. (Withdrawn) The protein of claim 1, wherein said protein is part of a fusion protein.
14. (Withdrawn) The protein of claim 13, wherein said fusion protein further comprises an immunoglobulin F_c domain.
15. (Withdrawn) The protein of claim 13, wherein said fusion protein further comprises a complement protein.

16. (Withdrawn) The protein of claim 13, wherein said fusion protein further comprises a toxin protein.
17. (Withdrawn) The protein of claim 13, wherein said fusion protein further comprises an albumin protein.
18. (Withdrawn) The protein of claim 1, wherein said protein is covalently bound to a nucleic acid.
19. (Withdrawn) The protein of claim 18, wherein said nucleic acid encodes said protein.
20. (Withdrawn) The protein of claim 18, wherein said nucleic acid is RNA.
21. (Withdrawn) The protein of claim 1, wherein said protein is a multimer.
22. (Withdrawn) The protein of claim 1 or 9, wherein said protein is formulated in a physiologically-acceptable carrier.
23. (Withdrawn) A nucleic acid encoding the protein of claim 1 or 4.
24. (Withdrawn) The nucleic acid of claim 23, wherein said nucleic acid is DNA.
25. (Withdrawn) The nucleic acid of claim 23, wherein said nucleic acid is RNA.
26. (Withdrawn) A method for generating a protein comprising a fibronectin type III domain which is pharmaceutically acceptable to a mammal, said method comprising removing an integrin-binding domain from said fibronectin type III domain.
27. (Withdrawn) The method of claim 26, wherein said integrin binding motif is replaced by an amino acid sequence comprising a basic amino acid-neutral amino acid-acidic amino acid.
28. (Withdrawn) The protein of claim 27, wherein said integrin-binding motif is replaced by an amino acid sequence comprising serine-glycine-glutamate.
29. (Withdrawn) The method of claim 26, wherein said at least one loop of said fibronectin type III domain is randomized.
30. (Withdrawn) The method of claim 26, wherein said protein comprises the tenth module of said fibronectin type III domain.
31. (Withdrawn) The protein of claim 26, wherein said protein is part of a fusion protein.

32. (Withdrawn) The protein of claim 31, wherein said fusion protein further comprises an immunoglobulin F_c domain.
33. (Withdrawn) The protein of claim 31, wherein said fusion protein further comprises a complement protein.
34. (Withdrawn) The protein of claim 31, wherein said fusion protein further comprises a toxin protein.
35. (Withdrawn) The protein of claim 31, wherein said fusion protein further comprises an albumin protein.
36. (Withdrawn) The method of claim 26, wherein said mammal is a human.
37. (Withdrawn) A method for obtaining a protein which binds to a compound, said method comprising:
- (a) contacting said compound with a candidate protein, said candidate protein comprising a fibronectin type III domain having at least one randomized loop, said contacting being carried out under conditions that allow compound-protein complex formation; and
 - (b) obtaining, from said complex, said protein which binds to said compound.
38. (Withdrawn) A method for obtaining a compound which binds to a protein, said protein comprising a fibronectin type III domain having at least one randomized loop, said method comprising:
- (a) contacting said protein with a candidate compound, said contacting being carried out under conditions that allow compound-protein complex formation; and
 - (b) obtaining, from said complex, said compound which binds to said protein.
39. (Withdrawn) The method of claim 37, said method further comprising randomizing at least loop of said fibronectin type III domain of said protein obtained in step (b) and repeating said steps (a) and (b) using said further randomized protein.
40. (Withdrawn) The method of claim 38, said method further comprising modifying said compound obtained in step (b) and repeating said steps (a) and (b) using said further modified compound.

41. (Withdrawn) The method of claim 37 or 38, wherein said compound is a protein.
42. (Withdrawn) The method of claim 37 or 38, wherein said fibronectin type III domain is a mammalian fibronectin type III domain.
43. (Withdrawn) The method of claim 42, wherein said fibronectin type III domain is a human fibronectin type III domain.
44. (Withdrawn) The method of claim 37 or 38, wherein said protein comprises the tenth module of said fibronectin type III domain (¹⁰F_n3).
45. (Withdrawn) The method of claim 44, wherein said compound binding is mediated by one ¹⁰F_n3 loop.
46. (Withdrawn) The method of claim 44, wherein said compound binding is mediated by two ¹⁰F_n3 loops.
47. (Withdrawn) The method of claim 44, wherein said compound binding is mediated by three ¹⁰F_n3 loops.
48. (Withdrawn) The method of claim 44, wherein the second loop of said ¹⁰F_n3 is extended in length relative to the naturally-occurring module.
49. (Withdrawn) The method of claim 44, wherein said ¹⁰F_n3 lacks an integrin-binding motif.
50. (Withdrawn) The method of claim 37, wherein said compound is immobilized on a solid support.
51. (Withdrawn) The method of claim 38, wherein said protein is immobilized on a solid support.
52. (Withdrawn) The method of claim 50 or 51, wherein said solid support is a column or microchip.